



FirstNet[®]



FirstNet & Firefighting Tactics

Mike Worrell

Senior Fire Services Advisor

Fire Command Structure

- Initial Company Officer
 - Strategic Decision Making
 - Experience
 - Known & Unknowns
 - Task Saturated
 - 4 min response
 - Time Factor
 - Very influential to the process
 - Manages Strategic, Tactical and Task levels
 - Establishes the command framework



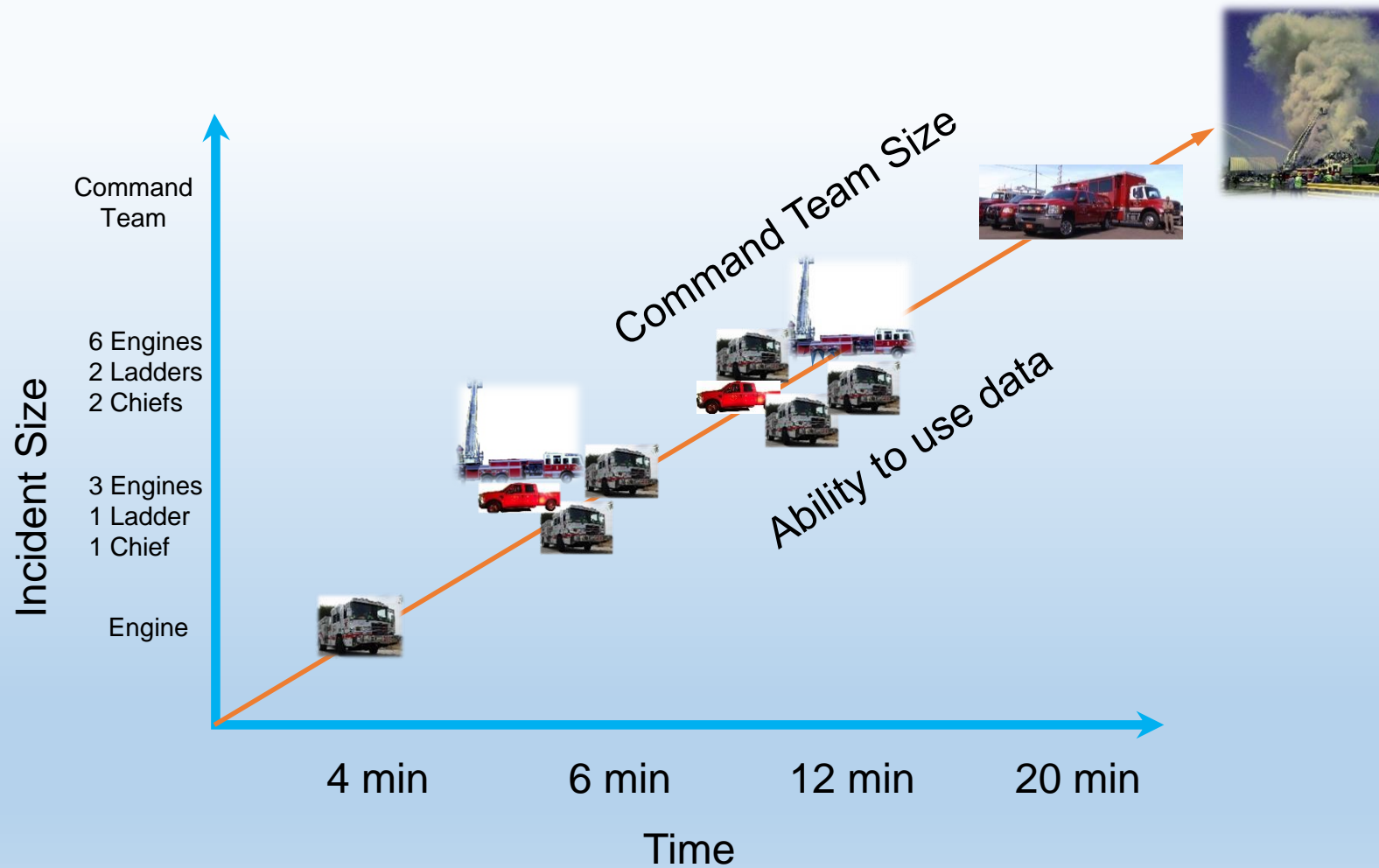
Fire Command Structure



- First Arriving Chief Officer
 - Command focus
 - Wider view- Strategic & Tactical
 - Support Officer
 - Accountability
 - Safety
 - 1st Division of Labor separating Task Level from Tactical and Strategic functions
 - Reduces Span-of-Control for the initial Incident Commander.

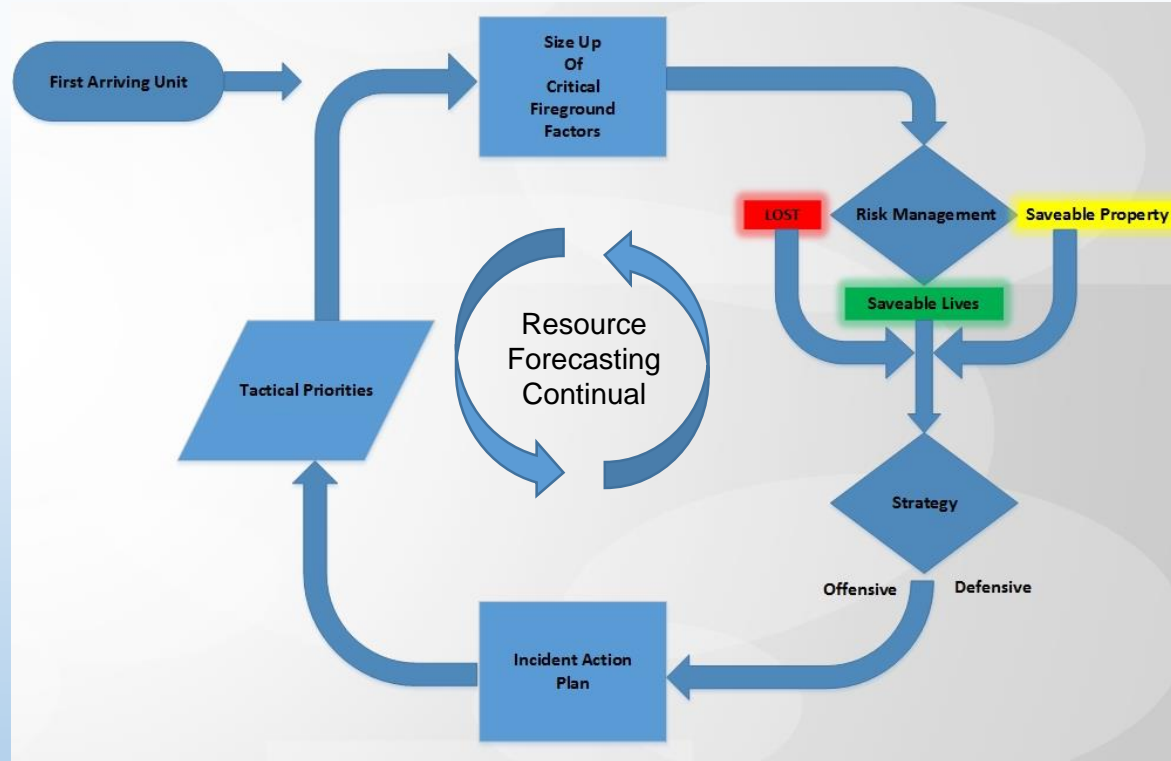


Command Team & Data Use



Where is the potential to change fireground tactics?

- Size-up
 - *Critical Fireground Factors*
- Identify the *Risk Management* Profile
- *Strategy*
- This process is done in a few seconds by observations, previous knowledge & reconnaissance.
- An *Incident Action Plan* is formulated and *Tactical Priorities* are identified.
- The assignments reflect the strategy and tactical priorities.



Strategic Decision Making Model

Critical Fireground Factors



Building

- Building Layout
- Construction type, material
- Ventilation Profile
- System Access
 - Fire Alarm
 - Ventilation
 - Security
 - Card Access (People)

Fire

- Visual Observations – Location, Size, Extent, Direction
- Smoke – Color, Pressure
- Fire Alarm
 - Time of Activation
 - Sprinkler Activations = Water Flow,
 - Order of Activations = Direction of Travel
 - Smoke Detectors (Extent)
 - Video

Special Circumstances

- Day of week
- Day/night
- Holiday
- Season
- Weather

Actions

- Effective/Non-effective
- Additional actions
- Information
- Forecasting
- Tactical Priorities
 - FC, AC, LS

Arrangement

- Access
- Exposures
 - Value
 - Combustibility
- Fire direction of travel
- Barriers

Life Hazard

Occupants

- Number
- Rescue or Self-extrication
- Resource requirements
 - EMS
 - Transport
- Hazard to fire personnel

Resources

- Manpower (number, condition, capabilities)
- Responding/Staged equipment/personnel
- Equipment
- Water system, status
- Fire protection systems

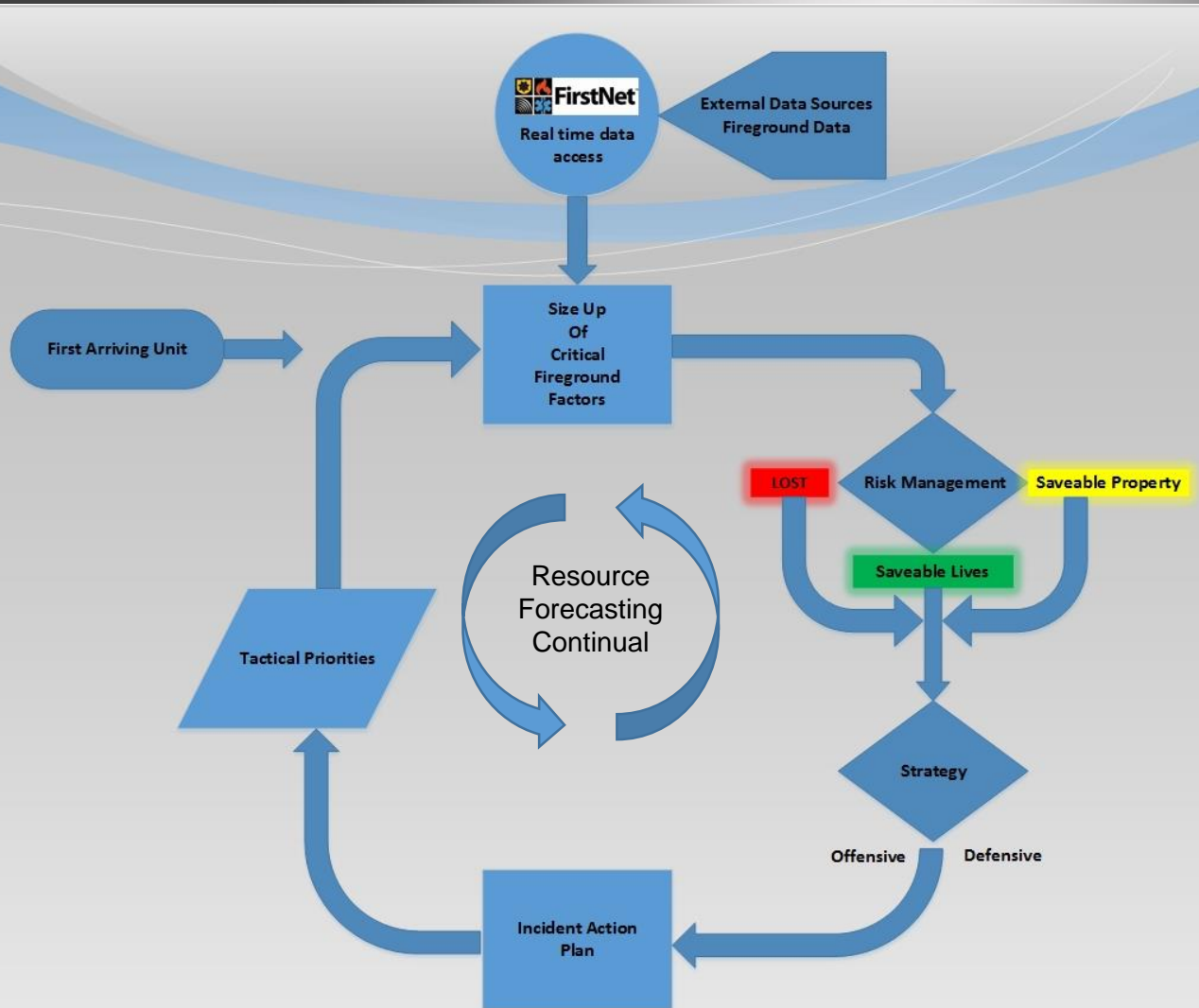
Occupancy

Type

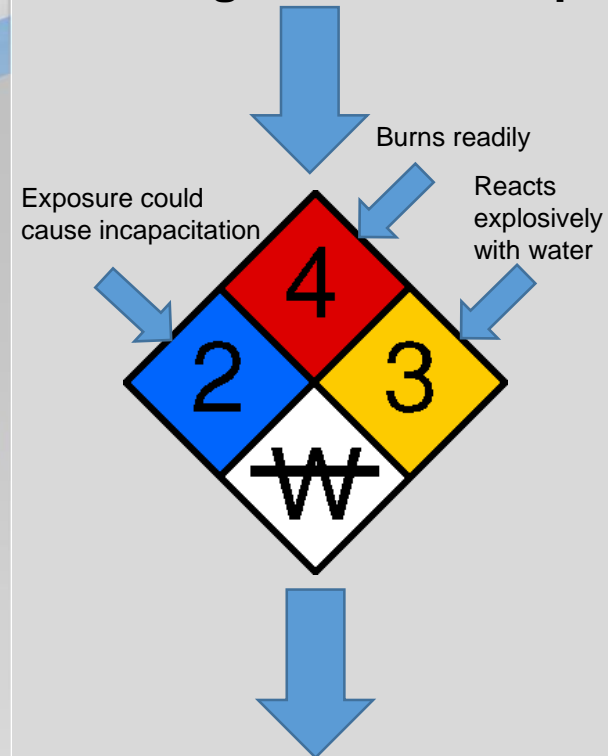
- Business
- Residence
- Mufti-family, Manufacturing (Haz Mat)
- People, Materials
- Fire load
- Value

TIME

Decision Making with FirstNet



Knowing this at Size-Up



Changes tactics and resource requirements

The Firefighter

- Firefighters protective equipment
 - 500 degrees for 5 min
- Air Management
 - Approx 30 min work time.
- Fuel Changes
 - 1940s – 2016
 - Fire Behavior
- Experience Level
- Training
- Accountability Systems
 - Manual
 - Computer Based

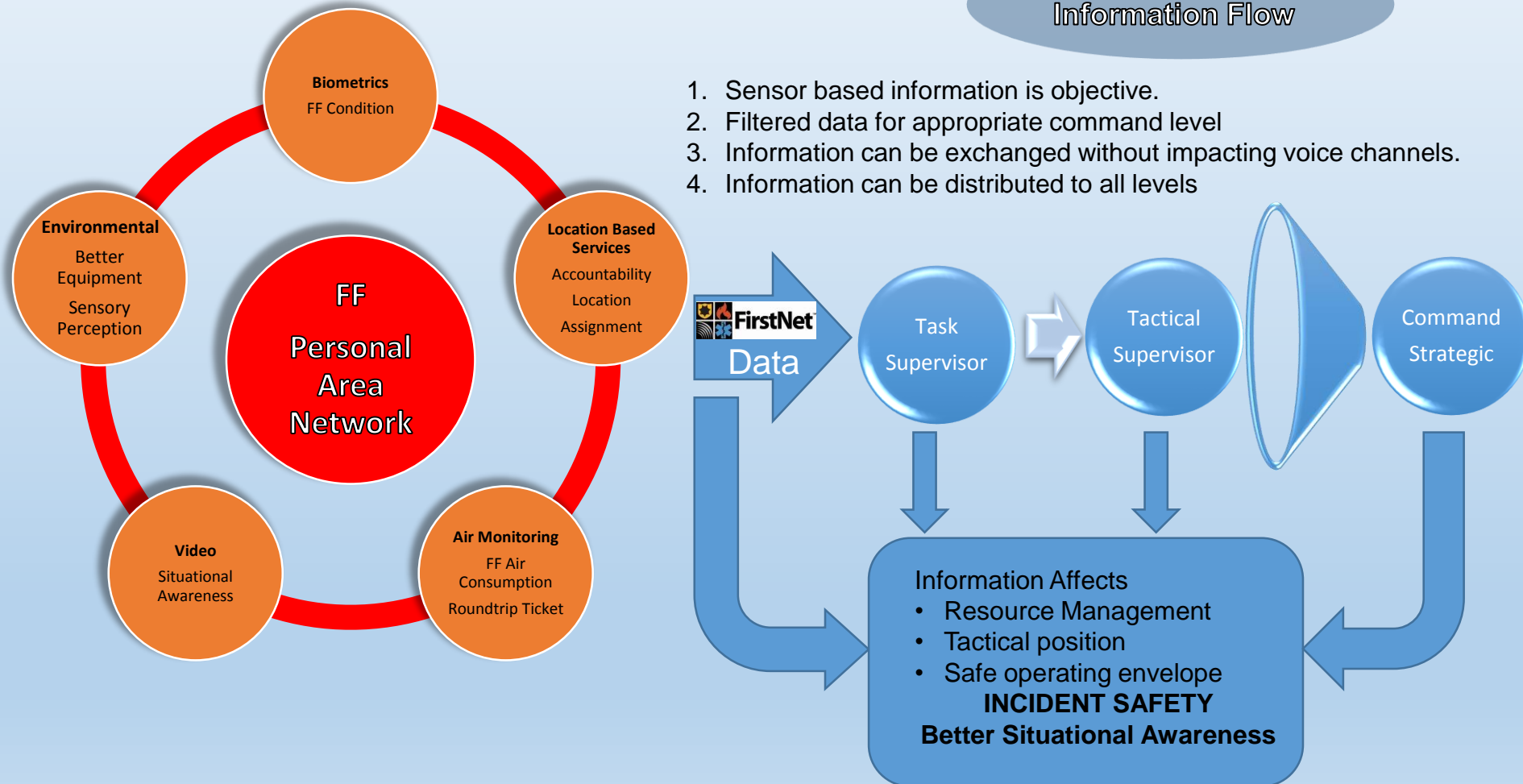


Fireground Data & Tactics



Incident Information Flow

1. Sensor based information is objective.
2. Filtered data for appropriate command level
3. Information can be exchanged without impacting voice channels.
4. Information can be distributed to all levels



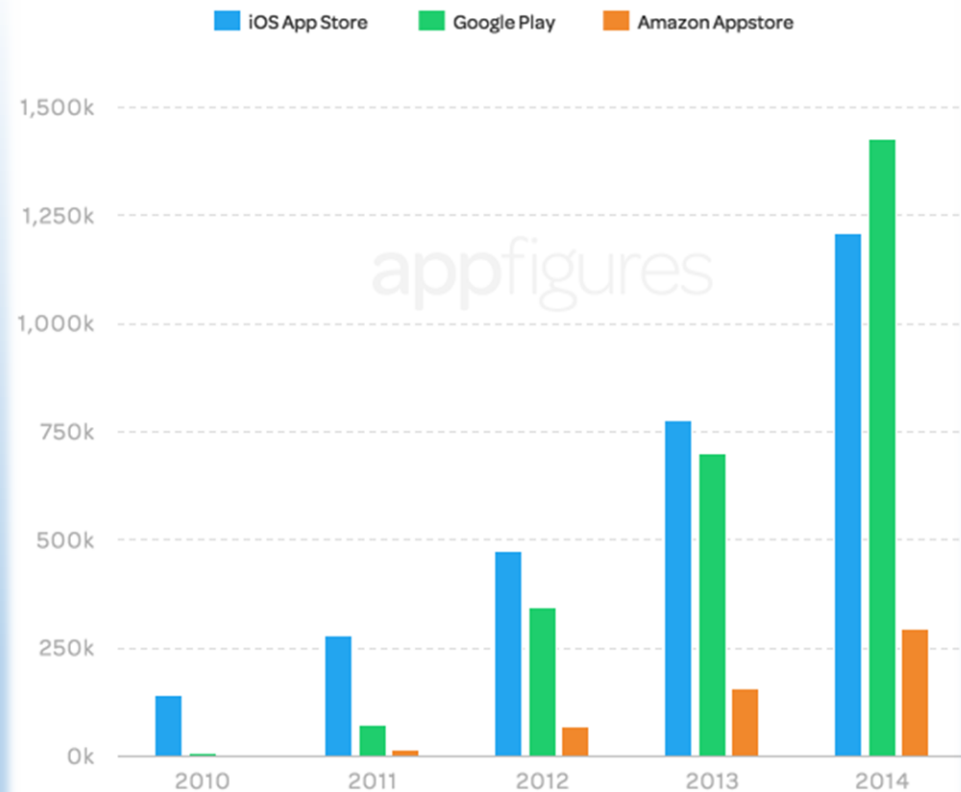
Applications

The I-tunes app store opened in 2008 with approximately 500 apps, today it has over 1.5 million applications.

In the first year the number of applications grew from 500 to 60,000

The public safety appetite for safety and technology improvements will drive the development of applications in the future.

Total Number of Apps by App Store



<http://blog.appfigures.com/app-stores-growth-accelerates-in-2014/>

Questions



Contact information:

Mike Worrell

Senior Fire Services Advisor

First Responder Network Authority

mike.worrell@firstnet.gov

202 815-8455

